8/16/10

Conceptual Framework and Types of Questions and Analyses

**A** *Impact analysis.* Relates outcomes to care models controlling for nursing home (and in some cases individual resident attributes) *without* considering intervening nursing home practices. Uses panel data with matching of comparison groups and multiple regression. (See Amy’s paper.)

**Outcomes**

Quality of care

Cost

Job quality

**A**

**Care Model**

Green House

Small house

Other culture change

Traditional

**Nursing Home Attributes** Facility characteristics

Resident attributes

Prior outcomes

Prior practices

Unobserved factors

**B** *Adoption analysis.* Relates choice of care models to nursing home attributes. Uses multivariate models with cross section or panel data.

**C** *Determinants of outcomes.* Relates outcomes to nursing home practices and some nursing home attributes (and, in analyses that measure outcomes at the individual resident level, including resident attributes). Uses multivariate analysis usually on cross section data (due to data collection costs), but can be done using longitudinal data. (See Sheryl’s paper and Susan and Siobhan’s work.)

**Note:** Questions and types of analyses **C** and **D** can use the same data collection activities and some of the same data, but I think of them as differing in analytic approach as well as sample size requirements and methodological issues, and **C** requires outcome measures.

**D** *Understanding nursing home practices.* [Note: A good name is hard to find.] Conducts telephone or site visit interviews (including semi-structured interviews) or focus groups with staff of the nursing homes and other respondents to obtain their insights. Analyzes transcripts to develop conceptual frameworks, suggest hypotheses, or inform other analyses. Also, collects quantitative data on-site from records or surveys and conducts comparative analyses. (See Siobhan’s worker time analysis is an example of the later and Barbara’s papers illustrate conceptual framework development.)

**Care Model**

Green House

Small house

Other culture change

Traditional

**Outcomes**

Quality of care

Cost

Workforce outcomes

**Nursing Home Practices**

Structure and processes

Essential elements

Workforce practices

Resident attributes

**D**

**C**

**B**

**Nursing Home Attributes** Facility characteristics

Resident attributes

Prior outcomes

Prior practices

Unobserved factors

Types of Data:

*Facility data*: OSCAR, CMS Cost Reports, NH Compare, Brown LTCfocusUS data, etc. (e.g., what Amy used in her paper)

*Pioneer Survey*: Planned Pioneer survey on elements of culture change adopted broadened to include Green House and comparison homes with hoped-for Commonwealth funding

*Qualitative interviews*: In-depth, semi-structured interviews with informants at all levels conducted on site visits (or potentially by telephone), probably transcribed for analysis (e.g., what Barbara and Kim collected in the Green House paper); potentially focus groups

*Quantitative organization data*: Measures of structure, process, outcomes, and other organization-level and individual-level data collected through on-site surveys or extracted from records (e.g., what Susan and Siobhan have collected in the past).

*Large surveys*: Telephone, mail, or internet surveys with large enough samples to require central administration.

*MDS* data at individual level

*Claims*: Medicare and possibly Medicaid data at individual level.

Table. Questions and methods

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Question | Data | Sample | Comparison | Comments |
| A. Impact Analysis |  |  |  |  |
| 1. What is the impact of model of care on quality? | a. Facility data  b. MDS  c. Claims (service use indicators, like avoidable hospitalizations) | Subset of all facilities set by matching | Models of care  Traditional homes  High quality homes | Analytically similar analyses can be done with different data (with costs increasing correspondingly |
| 2. What is the impact of model of care on cost? |  |  |  |  |
| B. Adoption Analysis |  |  |  |  |
| 3. What facility factors are associated with choice of model of care? | Same as quality | All facilities (for starters) | [Choice of model of care is outcome] | In addition to the substantive answer, this analysis is the basis of propensity score matching |
| C. Determinants of Outcomes |  |  |  |  |
| 4. What structure, process, resident, and other factors are associated with quality of care (and other outcomes)? | a. Quantitative organizational data on outcomes and practices  b. Facility data, MDS, or claims used with Pioneer survey | 60-100  Pioneer sample size |  | Analytically similar analyses can be done with four types of data |
| D. Understanding Nursing Home Practices |  |  |  | The questions as I have stated them are probably overlapping and being developed |
| 5. What are the essential elements of the Green House model? |  |  |  |  |
| 6. What is necessary to assure that essential elements are in place? |  |  |  |  |
| 7. What are best workforce practices? |  |  |  |  |